March 10, 2003

Mr. Dean K. Logan
Rieth-Riley Construction Co., Inc.
P. O. Box 477
Goshen, IN 46527

Re: 097-16771-00088
First Significant Revision to
FESOP 097-14764-00088

Dear Mr. Logan

Rieth-Riley Construction Co., Inc. was issued a FESOP Renewal on September 27, 2002, for a hot mix asphalt plant located at 2605 South Kentucky Avenue, Indianapolis IN 46241. A letter requesting changes to this permit was received on November 12, 2002. Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to the FESOP is hereby approved as described in the attached Technical Support Document:

(a) One (1) Batch Mixer (unit ID 2) with a maximum rated capacity of 400 tons per hour, and one (1) 150 million Btu per hour aggregate Dryer. The primary fuel to be used is landfill gas, with No. 4 waste oil, No. 2 distillate fuel oil, No. 4 distillate fuel oil, butane, propane and natural gas as backup fuels. Particulate emissions are controlled by one (1) baghouse, blower rated at 70,000 acfm and exhausting at stack 1.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Indiana Department of Environmental Management, Office of Air Quality (OAQ) and City of Indianapolis, Office of Environmental Services (OES).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Keshav Reddy at Indianapolis Office of Environmental Services, 2700 South Belmont Avenue, Indianapolis IN 46221, or call (317) 321-2221.

Sincerely,

Original Signed by John B. Chavez
John B. Chavez, Administrator
Office of Environmental Services
City of Indianapolis

Attachments
kr
cc: U.S. EPA, Region V
Mindy Hahn, IDEM OAQ
IDEM OAQ Compliance Data Section -Karen Nowak
IDEM OAQ Technical Support and Modeling - Michelle Boner

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) Renewal
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
CITY OF INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES

Rieth-Riley Construction Co., Inc.
2605 South Kentucky Avenue
Indianapolis, Indiana 46241

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F097-14764-00088	
Issued by: John B. Chavez, Administrator Office of Environmental Services	Issuance Date: September 27, 2002 Expiration Date: September 27, 2007
Significant Permit Revision no. : 097-16771-00088	Pages Affected : 3, 5, 26, 27, 28, 29, 35, 36, 37, 39, 40, 41, 42, 43, 44 and 45 Pages Added : 1
Issued by: Original Signed by John B. Chavez John b. Chavez, Administrator Office of Environmental Services	Issuance Date: Expiration Date: September 27, 2007

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]
C.13 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]
C.14 Pressure Gauge Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.16 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]
C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]
C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.19 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]
C.20 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]
C.21 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

SECTION D.1 FACILITY OPERATION CONDITIONS

One (1) Batch Mixer (unit ID 2); and One (1) Hot Oil Heater

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Sulfur Dioxide (SO_2) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]
D.1.2 Sulfur Dioxide Emission Limitations [326 IAC 7-1.1-2]
D.1.3 Nitrogen Oxides (NO_x) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]
D.1.4 Particulate Matter (PM) [326 IAC 6-1-2] [326 IAC 2-2] [40 CFR 52.21]
D.1.5 Asphalt Plant [326 IAC 12] [40 CFR 60.90-60.93, NSPS Subpart I]
D.1.6 Particulate Matter less than 10 microns (PM-10) [326 IAC 2-8-2] [326 IAC 2-2] [40 CFR 52.21]
D.1.7 Miscellaneous Operations: Asphalt Paving [326 IAC 8-5-2]
D.1.8 Volatile Organic Compound (VOC) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]
D.1.9 Preventative Maintenance Plan [326 IAC 2-8-4(9)] [326 IAC 1-6-3]
D.1.10 Used Oil Requirements [326 IAC 13]

Compliance Determination Requirements [326 IAC 3-7-4]

D.1.11 Sulfur Dioxide Emissions and Sulfur Content

Testing Requirements [326 IAC 2-8-4 (3)]

D.1.12 Testing Requirement

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.13 Parametric Monitoring
D.1.14 Baghouse Inspections
D.1.15 Broken or Failed Bag Detection

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary hot drum-mix asphalt plant with a maximum capacity of 425 tons per hour.

Authorized Individual:	Dean K. Logan, Asphalt Plant Specialist
Source Address:	2605 South Kentucky Avenue, Indianapolis, Indiana 46241
Mailing Address:	P.O. Box 477, Goshen, Indiana 46527-0477
SIC Code:	2951
Source Location Status:	Marion
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) Batch Mixer (Unit ID 2) with a maximum rated capacity of 400 tons per hour and one (1) 150 million Btu per hour aggregate dryer. The primary fuel to be used is landfill gas, with No. 4 waste oil, No. 2 distillate fuel oil, No. 4 distillate fuel oil, butane, propane and natural gas as backup fuels. Particulate emissions are controlled by one (1) baghouse, blower rated at 70,000 acfm and exhausting at stack 1. The unit was installed in 1997.

(b) One (1) Hot Oil Heater, 2.8 million Btu per hour maximum rated capacity. The primary fuel source is No. 2 oil with natural gas, propane, and butane as backup. The Hot Oil Heater exhausts at stack 2. The unit was installed in 1980.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) One (1) 25,000 gallon VOL Storage Tank, maximum true vapor pressure less than 15.0 kPa. This unit was installed in 1983.

(b) One (1) 20,000 gallon VOL Storage Tank, maximum true vapor pressure less than 15.0 kPa. This unit was installed in 1996.

(c) One (1) 15,000 gallon VOL Storage Tank, maximum true vapor pressure less than 15.0 kPa. This unit was installed in 1983.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(1) One (1) Batch Mixer (Unit ID 2) with a maximum rated capacity of 400 tons per hour and one (1) 150 million Btu per hour aggregate dryer. The primary fuel to be used is landfill gas, with No. 4 waste oil, No. 2 distillate fuel oil, No. 4 distillate fuel oil, butane, propane and natural gas as backup fuels. Particulate emissions are controlled by one (1) baghouse, blower rated at 70,000 acfm and exhausting at stack 1.

(2) One (1) Hot Oil Heater, 2.8 million Btu per hour maximum rated capacity. The primary fuel source is No. 2 oil with natural gas, propane, and butane as backup. The Hot Oil Heater exhausts at stack 2. The unit was installed in 1980.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Sulfur Dioxide (SO_2) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]

(a) Pursuant to 326 IAC 2-8-4, the input of residual No. 4 waste oil to the dryer/burner shall be limited to less than 1,262,310 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to SO_2 emissions of less than 92.8 tons per year. Sulfur content of the residual No. 4 waste oil shall not exceed one percent (1%) sulfur by weight. This limit is structured such that when including the emissions of the insignificant activities, the total source SO_2 emissions remain below one hundred (100) tons per twelve (12) consecutive month period. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program), 326 2-2 (Prevention of Significant Deterioration), and 40 CFR 52.21 not applicable.

(b) For purposes of determining compliance based on SO_2 emissions:

(1) Each gallon of No. 4 distillate oil shall be equivalent 0.510 gallons of waste oil,

(2) Each gallon of No. 2 distillate oil shall be equivalent to: 0.483 gallons of waste oil,

(3) Each gallon of propane shall be equivalent to 0.001 gallons of waste oil,

(4) Each gallon of butane shall be equivalent to 0.001 gallons of waste oil,

(5) Every million cubic feet of natural gas shall be equivalent to 4.081 gallons of waste oil; and

(6) Every cubic foot of landfill gas shall be equivalent to 0.0000391 gallons of waste oil.

D.1.2 Sulfur Dioxide Emissions Limitations [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from the combustion of distillate (No. 2, No. 4) oil shall be limited to 0.5 pounds per million Btu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average.

D.1.3 Nitrogen Oxides (NO_x) [326 IAC 2-8-4] [326 IAC 2-2[[40 CFR 52.21]

(a) Pursuant to 326 IAC 2-8-4 (FESOP), the input of natural gas to the dryer/burner shall be limited to less than 687.57 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to NO_x emissions of less than 96.3 tons per year. This limit is structured such that when including the emissions of the insignificant activities, the total source NO_x emissions remain below one hundred (100) tons per twelve (12) consecutive month period. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program), 326 2-2 (Prevention of Significant Deterioration), and 40 CFR 52.21 not applicable.

(b) For purposes of determining compliance based on NO_x emissions:

(1) Every 1000 gallons of residual No. 4 waste oil burned shall be equivalent to 0.068 million cubic feet of natural gas,

(2) Every 1000 gallons of No. 2 distillate oil burned shall be equivalent to 0.086 million cubic feet of natural gas,

(3) Every 1000 gallons of No. 4 distillate oil burned shall be equivalent to 0.168 million cubic feet of natural gas

(4) Every 1000 gallons of butane burned shall be equivalent to 0.075 million cubic feet of natural gas,

(5) Every 1000 gallons of propane burned shall be equivalent to 0.068 million cubic feet of natural gas; and

(6) Every cubic foot of landfill gas burned shall be equivalent to 0.000000101 million cubic feet of natural gas.

D.1.4 Particulate Matter (PM) [326 IAC 6-1-2] [326 IAC 2-2] [40 CFR 52.21]

Pursuant to 326 IAC 6-1-2, particulate matter emissions from the asphalt plant shall not exceed 0.030 grains per dry standard cubic foot. In order to meet this requirement, the baghouse shall be operated at all times the asphalt plant is in operation. Compliance with this rule renders 326 IAC 2-2 not applicable.

D.1.5 Asphalt Plant [326 IAC 12] [40 CFR 60.90-60.93, NSPS Subpart I]

Pursuant to the New Source Performance Standards, 326 IAC 12(40 CFR 60.90 to 60 .93, Subpart I):

(a) Particulate matter emissions from the hot mix asphalt facility shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf). Compliance with 326 IAC 6-1-2(a) will satisfy 326 IAC 12 and 40 CFR 60.92(a)(1), Subpart I.

(b) The visible emissions from the hot mix asphalt facility shall not exceed twenty percent (20%) opacity.

(c) Pursuant to 40 CFR 60.7(a), the permittee shall submit to OES/AQM and IDEM/OAQ the following:

(1) a notification of the date of construction of the aggregate dryer is commenced postmarked no later than 30 days after such date.

(2) a notification of the actual date of initial start up of the aggregate dryer postmarked within 15 days after such date.

(3) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. OES/AQM and IDEM/OAQ may request additional relevant information subsequent to this notice.

(4) a notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for OES/AQM and IDEM/OAQ to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 prior to such date.

D.1.6 Particulate matter less than 10 microns (PM-10) [326 IAC 2-8-2] [326 IAC 2-2] [40 CFR 52.21]

(a) The total asphalt production for this plant shall be limited to 2,487,593 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This production limit is the equivalent of 99.0 tons of PM-10 source wide per year.

(b) PM-10 emissions from combined process equipment and dryer/burner operations shall be limited to 0.06 pounds per ton (lb/ton). Due to the potential to emit limitations, the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 rules (326 IAC 2-7) are not applicable.

D.1.7 Miscellaneous Operations: Asphalt Paving [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2, no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven (7) percent oil distillate by volume of emulsion of any paving application except:

(a) Penetrating prime coating;

(b) Stockpile storage; and

(c) Application during the months of November, December, January, February, and March.

D.1.8 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-2] [40CFR 52.21]

(a) Pursuant to 326 IAC 2-8-4, the VOC solvent used as diluent in the liquid binder used in cold mix asphalt production from the plant shall be limited such that no more than ninety-five and three tenths (95.3) tons of VOC emissions emitted per twelve (12) consecutive months with compliance determined at the end of each month. This shall be achieved by limiting the total VOC solvent of any one selected binder to not exceed the stated limit in (c) for that binder during the last twelve (12) months. When more than one binder is used, the formula in (c)(6) must be applied so that the total VOC emitted does not exceed ninety-nine (99.0) tons per twelve (12) consecutive month period.

(b) Liquid binders used in the production of cold mix asphalt shall be defined as follows:

(1) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.

(2) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.

(3) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.

(4) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume

(5) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating

(c) The liquid binder used in cold mix asphalt production shall be limited as follows:

(1) Cutback asphalt rapid cure liquid binder usage shall not exceed 95.3 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(2) Cutback asphalt medium cure liquid binder usage shall not exceed 129.6 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(3) Cutback asphalt slow cure liquid binder usage shall not exceed 362.14 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(4) Emulsified asphalt with solvent liquid binder usage shall not exceed 194.41 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(5) Other asphalt with solvent liquid binder shall not exceed 3621.4 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(6) The VOC solvent allotments in subpart (c)(1) through (c)(5) of this condition shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period with compliance determined at the end of each month. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\frac{\text{Tons of solvent contained in binder}}{\text{Adjustment ratio}} = \text{tons of VOC emitted}$$

Type of Binder	Tons VOC	Adjustment Ratio	Tons VOC Emitted
Cutback Asphalt Rapid Cure		1	
Cutback Asphalt Medium Cure		1.36	
Cutback Asphalt Slow Cure		3.8	
Emulsified Asphalt		2.04	
Other Asphalt		38	

The equivalent total tons of VOC of the combined liquid binders shall be less than ninety-five and three tenths (95.3) tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with this limit will ensure that 326 IAC 2-7and 326 IAC 2-2 does not apply.

D.1.9 Preventive Maintenance Plan [326 IAC 2-8-4(9)] [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the drum/dryer burner and its control device.

D.1.10 Used Oil Requirements [329 IAC 13]

The waste oil burned in the dryer burner shall comply with the used oil requirements specified in 329 IAC 13 (Used Oil Management). Pursuant to 329 IAC 13-3-2 (Used Oil Specifications), used oil burned for energy recovery that is classified as off-specification used oil fuel shall comply with the provisions of 329 IAC 13-8 (Used Oil Burners Who Burn Off-specification Used Oil For Energy Recovery), including:

(a) Receipt of an EPA identification number as outlined in 329 IAC 13-8-3 (Notification),

(b) Compliance with the used oil storage requirements specified in 329 IAC 13-8-5 (Used Oil Storage), and

(c) Maintaining records pursuant to 329 IAC 13-8-6 (Tracking).

The burning of mixtures of used oil and hazardous waste that is regulated under 329 IAC 3.1 is prohibited at this source.

Compliance Determination Requirements

D.1.11 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3-7-4]

Compliance shall be determined utilizing one of the following options:

(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification;

or

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the two and eight tenths (2.8) MMBtu per hour heater, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall

not be refuted by evidence of compliance pursuant to the other method.

Testing Requirements [326 IAC 2-8-4(3)]

D.1.12 Testing Requirement

Within 60 days after achieving maximum production rate at which the drum mixer and aggregate dryer will be operated, but no later than 180 days after initial start up, the Permittee shall perform a stack test approved by OES/AQM and IDEM/OAQ to demonstrate compliance with D.1.4, D.1.5 and D.1.6. Stack test shall include testing for PM and PM10 (filterable and condensible). The stack test methods shall be in according with the provisions of 326 IAC 3-2.1 (Source Sampling Procedures).

Compliance Monitoring Requirements [326 IAC 2-8-5(a)(1)]

D.1.13 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the dryer burner, at least once per shift when the dryer burner is in operation when venting to the atmosphere. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test ,the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instruments Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and OES and shall be calibrated at least once every six (6) months.

D.1.14 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the dryer burner when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.1.15 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.1.16 Visible Emissions Notations

(a) Visible emission notations of the baghouse stack exhaust, conveyors, and transfer points shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.17 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain daily records of the input of residual No. 4 waste oil to the dryer burner.

(b) To document compliance with Condition D.1.2**,** the Permittee shall maintain records in accordance with (1) through (6) below:

(1) Calendar dates covered in the compliance determination period;

(2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

(3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1); and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications.

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(c) To document compliance with Condition D.1.3, the Permittee shall maintain daily records of the input of natural gas to the dryer burner.

(d) To document compliance with Condition D.1.6, the Permittee shall maintain records of asphalt production as follows:

(1) Amount of asphalt concrete produced each day;

(1) Amount of asphalt concrete produced in the last three hundred and sixty-five (365) days.

(e) To document compliance with Condition D.1.8 Volatile Organic Compounds, VOC records shall document VOC usage as follows:

(1) Amount and type of liquid binder used in the production of cold mix asphalt each day.

(2) Type and VOC, solvent content by weight of the liquid binder used in the production of cold mix asphalt each day.

(3) Amount of VOC, solvent used in the production of cold mix asphalt each day.

Records may include: delivery tickets, manufacturer's data, material safety data sheets (MSDS), and other documents necessary to verify the type and amount used. Test results of ASTM tests for asphalt cutback and asphalt emulsion may be used to document volatilization.

(f) To document compliance with Condition D.1.13, the Permittee shall maintain records of the total static pressure drop across the baghouse used in conjunction with the dryer burner, at least once per shift when the dryer burner is in operation when venting to the atmosphere.

(g) To document compliance with Condition D.1.14, the Permittee shall maintain quarterly records of the inspections performed on all bags controlling the dryer burner when venting to the atmosphere.

(h) To document compliance with Condition D.1.16, the Permittee shall maintain records of visible emission notations of the stack exhaust once per shift.

(i) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.18 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.3, D.1.6, and D.1.8 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) Reports to document compliance with condition D.1.5(c) shall be submitted to the addresses listed in Section C - General Reporting Requirements. The reports submitted by the Permittee do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
CITY OF INDIANAPOLIS
OFFICE of ENVIRONMENTAL SERVICES

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Rieth-Riley Construction Co., Inc.
Source Address: 2605 South Kentucky Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 477, Goshen, IN 46527-0477
FESOP No.: 097-14764-00088 and Significant Revision No. : 097-16771-00088

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

□ Annual Compliance Certification Letter

□ Test Result (specify) _____

□ Report (specify) _____

□ Notification (specify) _____

□ Affidavit (specify) _____

□ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue, Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

CITY OF INDIANAPOLIS
OFFICE OF ENVIRONMENTAL SERVICES
DATA COMPLIANCE
2700 South Belmont Avenue, Indianapolis, Indiana 46221
Phone:317-327-2234
Fax:317-327-2274

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Rieth-Riley Construction Co., Inc.
Source Address: 2605 South Kentucky Avenue, Indianapolis, IN 46241
Mailing Address: P.O. Box 477, Goshen, IN 46527-0477
FESOP No.: 097-14764-00088 and Significant Revision No. : 097-16771-00088

One (1) 20,000 gallon VOL storage tank, maximum true vapor pressure less than 15.0 kPa.

This form consists of 2 pages **Page 1 of 2**

☐ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____,I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____ .
(Company Name)

4. I hereby certify that Rieth-Riley has constructed the following:one (1) 150 million Btu per hour aggregate dryer in conformity with the requirements and intent of the construction permit application received by the Office of Environmental Services on Novemberr 12, 2002 and as permitted pursuant to **FESOP Significant Revision No. 097-16771-00088** issued on _____

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

_____
Signature

_____
Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 200_ .

My Commission expires: _____

_____
Signature

Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	Rieth-Riley Construction Co., Inc.
Source Location:	2605 South Kentucky Ave., Indianapolis IN 46241
County:	Marion
SIC Code:	2951
Operation Permit No.:	F 097-14764-00088
Operation Permit Issuance Date:	September 27, 2002
Significant Permit Revision No. :	F097-16771-00088
Permit Reviewer:	Keshav Reddy

The City of Indianapolis, Office of Environmental Services (OES) has reviewed a Significant Revision to FESOP application from Rieth-Riley Construction Co., Inc. relating to the modification and operation of the following emission units to be used in its hot mix asphalt plant:

(a) One (1) Batch Mixer (Unit ID 2) with a maximum rated capacity of 400 tons per hour and one (1) 150 million Btu per hour aggregate dryer. The primary fuel to be used is landfill gas, with No. 4 waste oil, No. 2 distillate fuel oil, No. 4 distillate fuel oil, butane, propane and natural gas as backup fuels. Particulate emissions are controlled by one (1) baghouse, blower rated at 70,000 acfm and exhausting at stack 1. The unit was installed in 1997.

History

On November 12, 2002, Rieth-Riley Construction Co., Inc. submitted an application to the OES requesting for the replacement of an existing 124 mmBtu/hr aggregate dryer with a new 150 mmBtu/hr aggregate dryer. Rieth-Riley construction Co., Inc. has also requested that the current FESOP status remain unchanged for this source. Rieth-Riley Construction Co., Inc. was issued a FESOP Renewal 097-14764-00088 on September 27, 2002.

Existing Approvals

(a) FESOP Renewal 097-14764-00088 was issued on September 27, 2002.

(b) FESOP 097-5589-00088 was issued on June 3, 1997.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
SV1	Batch Mixer/Dryer			70000	

Recommendation

The staff recommends to the Administrator that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on September 27, 2002.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Unrestricted Potential Emissions

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	56,441
PM-10	8,153
SO_2	297.8
VOC	>250*
CO	23.8
NO_x	323.1

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

***The VOC potential emissions include the maximum potential use of cold mix cutback asphalt.

HAP's	Unrestricted Potential Emissions (tons/yr)
Single HAP	10.2
Combined HAPs	10.2

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10, SO_2, VOC, and NO_x are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(w)(1) and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Potential To Emit Before Control/Limitation due to modification

Pollutant	Potential To Emit (tons/year)
PM	70.0
PM-10	---
SO_2	388.9
VOC	2.8
CO	31.9
NO_x	---

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Combined HAP's	12.2
TOTAL	12.2

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of SO2 is greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions
Since this type of operation is one of the listed source categories under 326 IAC 2-2-1 (w)(2) and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD applicability.

Justification for Revision

The replacement of aggregate dryer will result in an increase in the potential to emit of SO2 greater than 25 tons per year. Therefore, the modification is subject to 326 IAC IAC 2-8-11.1(f), Significant Permit Revision to FESOP.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OES emission data.

Pollutant	Actual Emissions (tons/year)
PM	9.74
PM-10	10.61
SO_2	17.53
VOC	0.27
CO	1.47
NO_x	5.59

Source Status

Existing Source PSD definition (emissions based on the latest permit (FESOP Renewal F097-14764-00088) issued on September 27, 2002, which reflects the PTE after controls and limitations).

	Potential to Emit After Issuance (tons/year)						
Process/emission unit	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Aggregate Dryer Mixer	21.6	21.6	0.0	0.0	0.0	0.0	0.0

Aggregate Dryer Burner	56.9	47.5	92.9	0.4	10.3	96.3	4.1
Combined Fugitive Dust	62.9	28.4	0.0	0.0	0.0	0.0	0.0
Cutback Asphalt	0.0	0.0	0.0	98.5	0.0	0.0	0.0
Insignificant Activities	0.2	0.1	6.1	0.1	0.5	2.7	0.0
Total PTE After Issuance	**141.4**	**97.6**	**99.0**	**99.0**	**10.8**	**99.0**	**4.1**

This existing stationary source is not major under the Prevention of Significant Deterioration (PSD) rules, because no regulated pollutant is emitted at a rate of 250 tons per year or greater.

Potential to Emit After Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this FESOP revision.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Aggregate Dryer Burner	38.5	32.2	92.8	1.9	28.9	96.3	12.2
Aggregate Mixer	38.3	38.3	0.0	0.0	0.0	0.0	7.4
Fugitive Dust	62.9	28.4	0.0	0.0	0.0	0.0	0.0
Cut Back Asphalt	0.0	0.0	0.0	97	0.0	0.0	0.0
Insignificant Activities	0.2	0.1	6.2	0.1	0.5	2.7	0.0
Total Emissions	139.9	99.0	99.0	99.0	29.4	99.0	19.6

* The emission factors were revised in this permit for dryer burner and aggregate mixer. It was discovered that the wrong emission factors were used in setting limits in permit F097-14764-00088. Therefore, the production limits, fuel usage limits and its equivalencies changed significantly in this revision.

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD thresholds. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	Unclassifiable
SO_2	maintenance attainment
NO_2	attainment
Ozone	maintenance attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as maintenance attainment for ozone.

Federal Rule Applicability

(a) The hot mix asphalt plant is subject to the New Source Performance Standard, 40 CFR Part 60.90, Subpart I (326 IAC 12) because this source meets the definition of a hot mix asphalt plant as described in 40 CFR 60.90(a), Subpart I and construction of the facility was commenced on August 10, 1983 which is after June 11, 1973. The requirements of 40 CFR 60.90, Subpart I, limit particulate emissions from the asphalt plant to 0.040 grains per dry standard cubic foot (gr/dscf) and visible emissions to 20% opacity.

Pursuant to 40 CFR 60.7(a), the permittee shall submit to OES/AQM and IDEM/OAQ the following:

(1) a notification of the date of construction of the aggregate dryer is commenced postmarked no later than 30 days after such date.

(2) a notification of the actual date of initial start up of the aggregate dryer postmarked within 15 days after such date.

(3) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §§ 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. OES/AQM and IDEM/OAQ may request additional relevant information subsequent to this notice.

(4) A notification of the anticipated date for conducting the opacity observations required by §§ 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for OES/AQM and IDEM/OAQ to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

Pursuant to 40 CFR 60.80 (a), within 60 days after achieving maximum production rate at which the drum mixer and aggregate dryer will be operated, but no later than 180 days after initial start up, the permittee shall conduct performance tests to show compliance with 40 CFR 60.90(a), Subpart I and furnish to OES/AQM and IDEM/OAQ written reports of the results of such performance test.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

The source has submitted an Emergency Reduction Plan (ERP) on February 20, 1990. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

326 IAC 1-6-3 (Preventive Maintenance Plan)

Pursuant to 326 IAC 2-8-4(9), the source is required to maintain a Preventive Maintenance Plan (PMP) on site for the batch mixer and aggregate dryer burner and its control device. Pursuant to

326 IAC 2-8-3(c)(6)(FESOP: Permit Application), the source is not required to submit the plan. However, the PMP maintained on site must meet the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan). The FESOP Renewal issued previously to this source, F097-14764-00088, has the requirement included in Condition B.13 and is being carried over to this revision.

326 IAC 2-2 (Prevention of Significant Deterioration)

The source commenced construction on August 10,1983 (after August 7, 1977), and therefore does not predate this rule. The source is also not one of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(w)(1) and its unrestricted potential to emit of PM, PM-10, VOC, SO_2 and NOx meet the definition of "major PSD source" pursuant to 326 IAC 2-2-1(w)(2). However, potential to emit of PM-10, VOC, SO_2 and NOx is being enforceably restricted to less than one hundred (100) tons per year such that 326 IAC 2-7 does not apply. In addition, PM is being enforceably restricted to less than two hundred and fifty (250) tons per year pursuant to 326 IAC 6-1-2. Therefore, potential to emit of PM, PM-10 VOC, NOx and SO_2 is being enforceably restricted to less than major thresholds such that 326 IAC 2-2 does not apply.

326 IAC 2-4.1 (Hazardous Air Pollutants)

The source is not subject to 326 IAC 2-4.1 because the plant was constructed on August 10, 1983 which is prior to July 27, 1997 and the source is not a major source of hazardous air pollutants, as defined in 40 CFR 63.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source is located in Marion County and has the potential to emit more than ten (10) tons per year of NO_X and VOC. Pursuant to this rule, the owner/operator of the source must submit an emission statement for the source. The statement must be received by April 15 of each year, in accordance with the compliance schedule specified in 326 IAC 2-6 and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The FESOP Renewal issued previously to this source, F097-14764-00088, has the requirement included in Condition C.19 and is being carried over to this revision.

326 IAC 2-8-4 (FESOP)

(a) Pursuant to this rule, source wide emissions of PM-10, SO_2, VOC and NO_x shall be limited to less than one hundred (100) tons per year such that it does not fall within any of the categories listed in 326 IAC 2-7-2(a) and that assure compliance with all applicable requirements at the time of FESOP issuance (see Emissions Calculations, Appendix A).

The following limits shall apply to assure compliance with this rule:

(1) <u>Sulfur Dioxide (SO_2)</u>

The input of No. 4 waste oil to the aggregate dryer shall be limited to less than 1,262,310 gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to SO_2 emissions of less than 92.8 tons per year. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source SO_2 emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source does not have major potential to emit for HAPs. Limiting source wide emissions of SO_2 will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

The addition of Landfill gas, No.2 distillate oil, No. 4 distillate oil, natural gas, propane and butane to the list of permitted fuels does not increase the potential to emit SO_2 because No. 4 waste oil is the worst case fuel for this pollutant (see Page 8 of 10 in Appendix A)**.** No. 4 waste oil was permitted in the original FESOP and renewal.

For purposes of determining compliance based on SO_2 emissions:

(A) Each gallon of No. 4 distillate oil shall be equivalent to 0.510 gallons of waste oil,

(B) Each gallon of propane shall be equivalent to 0.001 gallons of waste oil,

(C) Each gallon of butane shall be equivalent to 0.001 gallons of waste oil,

(D) Every million cubic feet of natural gas shall be equivalent to 0.004 gallons of waste oil.

(E) Each gallon of No. 2 distillate oil shall be equivalent to 0.483 gallons of waste oil.

(F) Every cubic foot of landfill gas shall be equivalent to 0.0000000391 gallons of waste oil.

(2) Nitrogen Oxides (NO_x) Emissions Limitations

The input of natural gas to the aggregate dryer shall be limited to less than 687.57 million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to NO_x emissions of less than 96.3 tons per year. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable. Due to the potential to emit limitation, the provisions of Prevention of Significant Deterioration (40 CFR 52.21) rules are not applicable.

These limits are structured such that when including emissions from insignificant activities, the total source NO_x emissions remain below one hundred (100) tons per twelve (12) consecutive month period. The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source does not have major potential to emit for HAPs. Limiting source wide emissions of NO_x will further limit the potential to emit of an individual HAP or combination of HAPs. This renders the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable.

The addition of Landfill gas, No.2 distillate oil, No. 4 distillate oil, propane, butane and No.4 waste oil to the list of permitted fuels does not increase the potential to emit NOx because natural gas is the worst case fuel for this pollutant (see Page 7 of 10 in Appendix A). Natural gas was permitted in the original FESOP and renewal.

For purposes of determining compliance based on NO_x emissions:

(A) Every 1000 gallons of residual No. 4 waste oil burned shall be equivalent to 0.068 million cubic feet of natural gas,

(B) Every 1000 gallons of No. 4 distillate oil burned shall be

equivalent to 0.168 million cubic feet of natural gas,

(C) Every 1000 gallons of butane burned shall be equivalent to 0.075 million cubic feet of natural gas, and

(D) Every 1000 gallons of propane burned shall be equivalent to 0.068 million cubic feet of natural gas.

(E) Every 1000 gallons of No. 2 distillate oil burned shall be equivalent to 0.086 million cubic feet of natural gas,

(F) Every cubic foot of landfill gas shall be equivalent to 0.000000101 million cubic feet of natural gas.

(3) Particulate matter less than 10 microns (PM-10)

(A) The total asphalt production for this plant shall be limited to 2,487,592 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This production limit is the equivalent of 99.0 tons of PM-10 emissions source wide per year.

(B) PM-10 emissions from combined process batch mixer and aggregate dryer operations shall be limited to 0.06 pounds per ton of asphalt produced (lb/ton) (see Page 6 of 10 in Appendix A). Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable. Due to the potential to emit limitations, the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 rule (326 IAC 2-7) are not applicable.

(4) Volatile Organic Compounds

Pursuant to 326 IAC 2-8-4, the liquid binder used in cold mix asphalt production shall be limited as follows:

(A) Cutback asphalt rapid cure liquid binder usage shall not exceed ninety-five and three tens (97) tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(B) Cutback asphalt medium cure liquid binder usage shall not exceed 131.9 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(C) Cutback asphalt slow cure liquid binder usage shall not exceed 378.3 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month .

(D) Emulsified asphalt with solvent liquid binder usage shall not exceed 197.9 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(E) Other asphalt with solvent liquid binder shall not exceed 3,686 tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(F) The VOC solvent allotments in (A) through (E) above shall be adjusted when more than one type of binder is used per twelve (12) month

consecutive period with compliance determined at the end of each month. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\frac{\text{Tons of solvent contained in binder}}{\text{Adjustment ratio}} = \text{tons of VOC emitted}$$

Type of binder	Tons VOC Solvent	Adjustment Ratio	VOC Emitted (tons)
Cutback Asphalt Rapid Cure		1	
Cutback Asphalt Medium Cure		1.36	
Cutback Asphalt Slow Cure		3.8	
Emulsified Asphalt		2.04	
Other Asphalt		38	

The equivalent total tons of VOC of the combined liquid binders shall be less than ninety-seven (97) tons per twelve consecutive month with compliance determined at the end of each month.

(b) The source wide unrestricted potential to emit of an individual HAP or combination of HAPs does not exceed the thresholds listed in 326 IAC 2-7-1(22), thus the source does not have major potential to emit for HAPs. Limiting source wide emissions of PM-10, VOC, SO_2, and NO_x will further limit the potential to emit of an individual HAP or combination of HAPs. Therefore, the source will not fall within any of the categories listed in 326 IAC 2-7-2(a) and will comply with all applicable requirements at the time of the FESOP issuance.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

The FESOP Renewal issued previously to this source, F097-14764-00088, has the requirement included and is being carried over to this revision.

326 IAC 6-4-1 (Fugitive Dust Emissions)

Pursuant to 326 IAC 6-4-1, the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). The FESOP Renewal issued previously to this source, F097-14764-00088, has the requirement included and is being carried over to this revision.

326 IAC 6-5 (Fugitive Particulate Emissions Limitations)

Pursuant to this rule, a fugitive dust control plan was submitted by the source on March 19, 1996. The plan was reviewed and approved. The source shall comply with all dust abatement measures contained therein. The FESOP Renewal issued previously to this source, F097-14764-00088, has the requirement included and is being carried over to this revision.

State Rule Applicability - Individual Facilities

Dryer Burner

326 IAC 6-1-2 (Particulate Limitations)

Pursuant to this rule, particulate matter emissions from the mixer and aggregate dryer shall not exceed 0.03 grains per actual standard cubic foot (gr/acsf). The baghouse shall be in operation at all times the dryer burner is in operation, in order to comply with this limit.

Pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.90 to 60 .93, Subpart I), particulate matter emissions from the asphalt plant shall not exceed 0.040 grains per dry standard cubic foot (gr/dscf) and that visible emissions from the asphalt plant shall not exceed 20% opacity. Compliance with these limits will also satisfy 326 IAC 5-1. Compliance with the requirements of 326 IAC 6-1-2 satisfies the requirement for 40 CFR 60.90 to 60.93 Subpart I grain loading limitation. The FESOP Renewal issued previously to this source, F097-14764-00088, has the requirement included and is being carried over to this revision.

326 IAC 7-1.1-2 (Sulfur Dioxide Emissions Limitations)

Pursuant to this rule, sulfur dioxide emissions from the combustion of distillate (No. 2 and No. 4) oil shall be limited to 0.5 pounds per million Btu heat input. The company has accepted a voluntary limit of 1% sulphur by weight on No. 4 waste oil. The FESOP Renewal issued previously to this source, F097-14764-00088, has the requirement included and is being carried over to this revision.

Miscellaneous Operations

326 IAC 8-5-2 (Miscellaneous Operations: Asphalt Paving)

Pursuant to 326 IAC 8-5-2, no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven (7) percent oil distillate by volume of emulsion of any paving application except:

(a) Penetrating prime coating;

(b) Stockpile storage; and

(c) Application during the months of November, December, January, February, and March.

The FESOP Renewal issued previously to this source, F097-14764-00088, has the requirement included and is being carried over to this revision.

Testing Requirements

326 IAC 2-8-4(3) (Performance Testing)

Within 720 days of the issuance of the most recent renewal, the permittee shall perform a stack test approved by OES/AQM and IDEM/OAQ to demonstrate compliance with 326 IAC 6-1-2, 326 IAC 2-2-2, and 326 IAC 2-8-4. Stack tests shall include testing for PM and PM-10 (filterable and condensible). The stack test methods shall be in according with the provisions of 326 3-2-1 (Source Sampling Procedures).

In order to demonstrate compliance with 326 IAC 2-8-4, PM-10 emissions from combined batch mixer and aggregate dryer operations are limited to 8.74 pounds per hour (lb/hr). The total

asphalt production for this plant is limited to 2,487,592 tons per twelve (12) consecutive month period. This production limit is the equivalent of 99.0 tons of PM-10 source wide per year.

Previous stack tests to comply with this requirement were conducted on August 11, 1998. PM emissions (particulate) were found to be 0.0202 gr/dscf. In order to demonstrate compliance with the requirements of 326 IAC 6-1-2, PM emissions are limited to less than 0.03 gr/dscf.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

All compliance requirements from previous approvals were incorporated into this significant permit revision. The compliance monitoring requirements applicable to this source are as follows:

1. The baghouse has applicable compliance monitoring conditions as specified below:

    a) Visible emission notations of the exhaust stack from the baghouse, conveyors, and transfer points shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

    (b) The Permittee shall record the total static pressure drop across the baghouse controlling the batch mixer and aggregate dryer, at least once per shift when the batch mixer and aggregate dryer are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 to 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

    (c) An inspection shall be performed each calender quarter of all bags controlling the

batch mixer and aggregate dryer when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

(d) In the event that bag failure has been detected:

(1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan-Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse controlling the aggregate drying and mixing process must operate properly to ensure compliance with 40 CFR 60.90, Subpart I, 326 IAC 2-8 (FESOP), and 326 IAC 6-1-2.

Revision to the FESOP

(1) Section A.2 is revised to replace the existing 124 mmBtu/hr aggregate dryer with a 150mmBtu/hr aggregate dryer and be numbered as item (a) as follows (changes are **bolded** and deletions are ~~struck- through~~ for emphasis):

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) ~~One (1) Batch mixer (unit ID 2), 400 tons per hour maximum rated capacity, and one (1) 133 million Btu per hour Aggregate Dryer. The primary fuel source is No.4 waste oil with natural gas, No.2 oil, No.4 oil, and propane as back up. Particulate emissions are controlled by one (1) baghouse, blower rated at 70,000 acfm and exhausting at stack 1. The unit was installed in 1997.~~ **One (1) Batch mixer (unit ID 2) with a maximum rated capacity of 400 tons per hour, and one (1) 150 million Btu per hour aggregate dryer. The primary fuel is landfill gas, with No. 4 waste oil , No. 2 distillate fuel oil, No. 4 distillate fuel oil, butane, propane and natural gas as backup fuels. Particulate emissions will be controlled by one (1) baghouse, blower rated at 70,000 acfm and exhausting at a stack, identified as SV1.**

(b) no changes

(2) Section D.1 is changed in the FESOP to incorporate the increase in the capacity of aggregate dryer.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) ~~One (1) Batch mixer (unit ID 2), 400 tons per hour maximum rated capacity, and one (1) 133 million Btu per hour Aggregate Dryer. The primary fuel source is No.4 waste oil with natural gas, No.2 oil, No.4 oil, and propane as back up. Particulate emissions are controlled by one (1) baghouse, blower rated at 70,000 acfm and exhausting at stack 1. The unit was installed in 1997.~~ **One (1) Batch mixer (unit ID 2) with a maximum rated capacity of 400 tons per hour, and one (1) 150 million Btu per hour aggregate dryer. The primary fuel is landfill gas, with No. 4 waste oil , No. 2 distillate fuel oil, No. 4 distillate fuel oil, butane, propane and natural gas as backup fuels. Particulate emissions will be controlled by one (1) baghouse, blower rated at 70,000 acfm and exhausting at a stack, identified as SV1.**

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Sulphur Dioxide (SO2) [326 IAC 2-8-4] [326 IAC 2-2] [40 CFR 52.21]

(a) Pursuant to 326 IAC 2-8-4, the input of residual No.4 waste oil to the aggregate dryer shall be limited to less than ~~1,736,554~~ **1,262,310** gallons per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to SO2 emissions of less than 92.8 tons per year. Sulphur content of the residual No.4 waste oil shall not exceed one percent (1%) sulphur by weight. This limit is structured such that when including the emissions of insignificant activities, the total source SO2 emissions remain below one hundred (100) tons per twelve (12) month consecutive period. This renders the requirements of 326 IAC 2-7 (Part 70 permit program), 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

(b) For purposes of determining compliance based on SO_2 emissions:

(1) Each gallon of No. 4 distillate oil shall be equivalent to ~~0.7009~~ **0.510** gallons of waste oil,

(2) Each gallon of No. 2 distillate oil shall be equivalent to ~~0.7336~~ **0.483** gallons of waste oil.

(3) Each gallon of propane shall be equivalent to ~~0.0009~~ **0.001** gallons of waste oil,

(4) Each gallon of butane shall be equivalent to ~~0.0009~~ **0.001** gallons of waste oil,

(5) Every million cubic feet of natural gas shall be equivalent to ~~5.607~~ **4.081** gallons of waste oil.

and

(6) Every cubic foot of landfill gas shall be equivalent to 0.0000391 gallons of waste oil.

D.1.3 Nitrogen Oxides (NO_x) [326 IAC 2-8-4] [326 IAC 2-2[[40 CFR 52.21]

(a) The input of natural gas to the aggregate dryer shall be limited to less than ~~350.18~~ **687.57** million cubic feet per twelve (12) consecutive month period with compliance determined at the end of each month, which is equivalent to NO_x emissions of less than 96.3 tons per year. Compliance with the potential to emit limitation makes 326 IAC 2-7 (Part 70 Permit Program) not applicable. Due to the potential to emit limitation, the

provisions of Prevention of Significant Deterioration (40 CFR 52.21) rules are not applicable.

(b) For purposes of determining compliance based on NO_x emissions:

(1) Every 1000 gallons of residual No. 4 waste oil burned shall be equivalent to ~~0.029~~ **0.068** million cubic feet of natural gas,

(2) Every 1000 gallons of No. 2 distillate oil burned shall be equivalent to ~~0.036~~ **0.086** million cubic feet of natural gas,

(3) Every 1000 gallons of No. 4 distillate oil burned shall be equivalent to ~~0.036~~ **0.168** million cubic feet of natural gas,

(4) Every 1000 gallons of butane burned shall be equivalent to ~~0.038~~ **0.075** million cubic feet of natural gas,

(5) Every 1000 gallons of propane burned shall be equivalent to ~~0.034~~ **0.068** million cubic feet of natural gas,

and

(6) Every cubic foot of landfill gas shall be equivalent to 0.000000101 million cubic feet of natural gas.

D.1.5 Asphalt Plant [326 IAC 12] [40 CFR 60.90-60.93, NSPS Subpart I]

Pursuant to the New Source Performance Standards, 326 IAC 12(40 CFR 60.90 to 60 .93, Subpart I):

(a) Particulate matter emissions from the hot mix asphalt facility shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf). Compliance with 326 IAC 6-1-2(a) will satisfy 326 IAC 12 and 40 CFR 60.92(a)(1), Subpart I, and

(b) The visible emissions from the hot mix asphalt facility shall not exceed twenty percent (20%) opacity.

(c) Pursuant to 40 CFR 60.7(a), the permittee shall submit to OES/AQM and IDEM/OAQ the following:

(1) a notification of the date of construction of the aggregate dryer is commenced postmarked no later than 30 days after such date.

(2) a notification of the actual date of initial start up of the aggregate dryer postmarked within 15 days after such date.

(3) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. OES/AQM and IDEM/OAQ may request additional relevant information subsequent to this notice.

(4) a notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for OES/AQM and IDEM/OAQ to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 prior to such date.

D.1.6 Particulate matter less than 10 microns (PM-10) [326 IAC 2-8-2] [326 IAC 2-2] [40 CFR 52.21]

(a) The total asphalt production for this plant shall be limited to ~~1,400,000~~ **2,487,592.6** tons per twelve (12) consecutive month period with compliance determined at the end of each month. This production limit is the equivalent of 99.0 tons of PM-10 source wide per year.

(b) PM-10 emissions from combined process equipment of batch mixer and aggregate dryer operations shall be limited to 0.06 pounds per ton (lb/ton). Due to the potential to emit limitations, the Prevention of Significant Deterioration (326 IAC 2-2 and 40 CFR 52.21) and Part 70 rules (326 IAC 2-7) are not applicable.

D.1.7 Miscellaneous Operations: Asphalt Paving [326 IAC 8-5-2]

Pursuant to 326 IAC 8-5-2, no person shall cause or allow the use of cutback asphalt or asphalt emulsion containing more than seven (7) percent oil distillate by volume of emulsion of any paving application except:

(a) Penetrating prime coating;

(b) Stockpile storage; and

(c) Application during the months of November, December, January, February, and March.

D.1.8 Volatile Organic Compounds (VOC) [326 IAC 2-8-4] [326 IAC 2-2] [40CFR 52.21]

(a) Pursuant to 326 IAC 2-8-4, the VOC solvent used as diluent in the liquid binder used in cold mix asphalt production from the plant shall be limited such that no more than ~~ninety-eight and five tens (98.5)~~ **ninety-seven (97.0)** tons of VOC emissions emitted per twelve (12) consecutive months. This shall be achieved by limiting the total VOC solvent of any one selected binder to not exceed the stated limit in (c) for that binder during the last twelve (12) months. When more than one binder is used, the formula in (c)(6) must be applied so that the total VOC emitted does not exceed ninety-nine (99.0) tons per twelve (12) consecutive month period.

(b) Liquid binders used in the production of cold mix asphalt shall be defined as follows:

(1) Cut back asphalt rapid cure, containing a maximum of 25.3% of the liquid binder by weight of VOC solvent and 95% by weight of VOC solvent evaporating.

(2) Cut back asphalt medium cure, containing a maximum of 28.6% of the liquid binder by weight of VOC solvent and 70% by weight of VOC solvent evaporating.

(3) Cut back asphalt slow cure, containing a maximum of 20% of the liquid binder by weight of VOC solvent and 25% by weight of VOC solvent evaporating.

(4) Emulsified asphalt with solvent, containing a maximum of 15% of liquid binder by weight of VOC solvent and 46.4% by weight of the VOC solvent in the liquid blend evaporating. The percent oil distillate in emulsified asphalt with solvent liquid, as determined by ASTM, must be 7% or less of the total emulsion by volume

(5) Other asphalt with solvent binder, containing a maximum 25.9% of the liquid binder of VOC solvent and 2.5% by weight of the VOC solvent evaporating

(c) The liquid binder used in cold mix asphalt production shall be limited as follows:

(1) Cutback asphalt rapid cure liquid binder usage shall not exceed ~~98.5~~ **97** tons of VOC solvent per twelve (12) consecutive month period **with compliance determined at the end of each month**.

(2) Cutback asphalt medium cure liquid binder usage shall not exceed ~~134.0~~ **131.9** tons of VOC solvent per twelve (12) consecutive month period **with compliance determined at the end of each month** .

(3) Cutback asphalt slow cure liquid binder usage shall not exceed ~~374.3~~ **378.3** tons of VOC solvent per twelve (12) consecutive month period **with compliance determined at the end of each month**.

(4) Emulsified asphalt with solvent liquid binder usage shall not exceed ~~200.9~~ **197.9** tons of VOC solvent per twelve (12) consecutive month period **with compliance determined at the end of each month**.

(5) Other asphalt with solvent liquid binder shall not exceed ~~3743.0~~ **3686** tons of VOC solvent per twelve (12) consecutive month period with compliance determined at the end of each month.

(6) The VOC solvent allotments in subpart (c)(1) through (c)(5) of this condition shall be adjusted when more than one type of binder is used per twelve (12) month consecutive period **with compliance determined at the end of each month**. In order to determine the tons of VOC emitted per each type of binder, use the following formula and divide the tons of VOC solvent used for each type of binder by the corresponding adjustment ratio listed in the table that follows.

$$\frac{\text{Tons of solvent contained in binder}}{\text{Adjustment ratio}} = \text{tons of VOC emitted}$$

Type of Binder	Tons VOC Solvent	Adjustment Ratio	Tons VOC Emitted
Cutback Asphalt Rapid Cure		1	
Cutback Asphalt Medium Cure		1.36	
Cutback Asphalt Slow Cure		3.8	
Emulsified Asphalt		2.04	
Other Asphalt		38	

The equivalent total tons of VOC of the combined liquid binders shall be less than ~~ninety-eight and five tens (98.5)~~ **ninety-seven (97.0)** per twelve (12) consecutive month period **with compliance determined at the end of each month**. Compliance with this limit will ensure that 326 IAC 2-7and 326 IAC 2-2 does not apply.

D.1.12 Testing Requirement

Within ~~720 days after issuance of the permit~~ **60 days after achieving maximum production rate at which the drum mixer and aggregate dryer will be operated, but no later than 180 days after initial start up**, the Permittee shall perform a stack test approved by OES/AQM and IDEM/OAQ to demonstrate compliance with D.1.4, D.1.5 and D.1.6. Stack test shall include testing for PM and PM10 (filterable and condensible). The stack test methods shall be in according with the provisions of 326 IAC 3-2.1 (Source Sampling Procedures).

D.1.18 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.3, D.1.6, and D.1.8 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) Reports to document compliance with condition D.1.5(c) shall be submitted to the addresses listed in Section C - General Reporting Requirements. The reports submitted by the Permittee do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

3) All the reporting forms have been revised to include the significant modification revision number and also the revised limits to address the modifications at the source. The revised forms and corresponding changes are included in the attached Appendix B.

Conclusion

The operation of this hot mix asphalt plant shall be subject to the conditions of the attached proposed **Significant Permit Revision No. 097-16771-00088.**

Dryer Burner (> 100 MMBtu/hr)

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

Fuel Source	Heat Input Capacity (MMBtu/hr)	Higher Heating Value	Units	ThroughPut	Units	Sulphur %
Natural Gas	150	1000	Btu/scf	**1314**	**MMCF/yr**	
No.4 Fuel Oil	150	138000	Btu/gal	**9521.74**	**kgal/yr**	**0.5**
No.4 Waste Oil	150	142000	Btu/gal	**9253.52**	**kgal/yr**	**1**
Propane	150	94000	Btu/gal	**13978.72**	**kgal/yr**	**1**
Butane	150	94000	Btu/gal	**13978.72**	**kgal/yr**	**1**
No.2 Fuel Oil	150	138000	Btu/gal	**9521.74**	**kgal/yr**	**0.5**
LandFill Gas	150	500	Btu/ft^3	**2628.00**	**MMCF/yr**	**0.034**

Criteria Pollutans for LandFill Gas :

	Emission Factor (lb/scf)	Controlled Potential Emissions (tons/yr)
PM	0.000053	**69.64**
PM10	0.000053	**69.64**
SO2	0.00000575	**7.56**
NOX	0.0000283	**37.19**
VOC	0.000000544	**0.71**
CO	0.00000347	**4.56**

Criteria Pollutants for Natural Gas :

	Emission Factor (lb/MMCF)	Uncontrolled Potential Emissions (tons/yr)
PM	1.9	**1.25**
PM10	7.6	**4.99**
SO2	0.6	**0.39**
NOX	280	**183.96**
VOC	5.5	**3.61**
CO	84	**55.19**

Criteria Pollutants for No.4 Fuel Oil :

	Emission Factor (lb/kgal)	Uncontrolled Potential Emissions (tons/yr)
PM	7	**33.33**
PM10	6	**28.57**
SO2	75	**357.07**
NOX	47	**223.76**
VOC	0.2	**0.95**
CO	5	**23.80**

Criteria Pollutants for No.4 Waste Oil :

	Emission Factor (lb/kgal)	Uncontrolled Potential Emissions (tons/yr)
PM	61	**282.23**
PM10	51	**235.96**
SO2	147	**680.13**
NOX	19	**87.91**
VOC	0.1	**0.46**
CO	5	**23.13**

Criteria Pollutants for Propane :

	Emission Factor (lb/kgal)	Uncontrolled Potential Emissions (tons/yr)
PM	0.6	**4.19**
PM10	0.6	**4.19**
SO2	0.1	**0.70**
NOX	19	**132.80**
VOC	0.25	**1.75**
CO	3.2	**22.37**

Criteria Pollutants for Butane :

	Emission Factor (lb/kgal)	Uncontrolled Potential Emissions (tons/yr)
PM	0.6	**4.19**
PM10	0.6	**4.19**
SO2	0.09	**0.63**
NOX	2.1	**14.68**
VOC	0.26	**1.82**
CO	3.6	**25.16**

Criteria Pollutants for No.2 Fuel Oil :

	Emission Factor (lb/kgal)	Uncontrolled Potential Emissions (tons/yr)
PM	2	**9.52**
PM10	1	**4.76**
SO2	71	**338.02**
NOX	24	**114.26**
VOC	0.2	**0.95**
CO	5	**23.80**

Criteria Pollutant	Uncontrolled Potential Emissions (tons/yr)	Worst Case Fuel
PM	**282.23**	No.4 Waste Oil
PM10	**235.96**	No.4 Waste Oil
SO2	**680.13**	No.4 Waste Oil
NOX	**223.76**	No.4 Distillate Oil
VOC	**3.61**	Natural Gas
CO	**55.19**	Natural Gas

HAPs from Natural Gas Combustion

	Emission Factor (lb/MMCF)	Uncontrolled Potential Emissions (tons/yr)
HAP - Organics		
Formaldehyde	7.50E-02	4.93E-02
Benzene	2.10E-03	1.38E-03
Hexane	1.80E+00	1.18E+00
Toluene	3.40E-03	2.23E-03
Dichlorobenzene	1.20E-03	7.88E-04
HAP-Metals		
Arsenic	2.00E-04	1.31E-04
Cadmium	1.10E-03	7.23E-04
Chromium	1.40E-03	9.20E-04
Lead	5.00E-04	3.29E-04
Mercury	2.60E-04	1.71E-04
Manganese	3.80E-04	2.50E-04
Nickel	2.10E-03	1.38E-03
	HAP Emissions from Natural Gas (tons/yr)	**1.24**

HAPs from #2 Fuel Oil Combustion

	Emission Factor (lb/MMBtu)	Uncontrolled Potential Emissions (tons/yr)
HAP-Metals		
Arsenic	4.00E-06	0.00E+00
Beryllium	3.00E-06	1.97E-03
Cadmium	3.00E-06	1.97E-03
Chromium	3.00E-06	1.97E-03
Lead	9.00E-06	5.91E-03
Mercury	3.00E-06	1.97E-03
Manganese	6.00E-06	3.94E-03
Nickel	3.00E-06	1.97E-03
Selenium	1.50E-05	9.86E-03
Copper	6.00E-06	3.94E-03
	HAP Emissions from #2 Fuel Oil (tons/yr)	**0.03**

HAPs from #4 Waste Oil Combustion

HAP-Metals

	Emission Factor (lb/kgal)	Uncontrolled Potential Emissions (tons/yr)
Lead	2.2	10.18

HAPs from Landfill gas	Emission Factor (lb/scf)	Controlled Potential Emissions (tons/yr)
Polycyclic Aromatic Hydrocarbons (PAH)	0.000000544	0.71
	Total HAP Emissions (tons/yr)	**12.17**

* AP-42, Chapters 1.3, 1.4 & 1.11

Uncontrolled Potential to Emit PM10 from Vehicle Travel on Unpaved Roads

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

E = (S/30) * (W/30)^0.7 * (w/4)^0.5 *(365-p)/: = lb particulate/vehicle mile traveled on unpaved roads
(AP-42, 13.2.2)

k =	0.36	particle size multiplier for PM10 (constant)
s =	5.7	silt content of road surface material (%), unspecified municipal roads
p =	120	number of days with at least 0.01 inch of precipitation (per year)

S = mean vehicle speed (mph)
W = mean vehicle weight (tons)
w = number of wheels

Vehicle Type	Mean Speed (mph)	Mean Weight (tons)	# of Wheels	Trip (mi) Distance	# Trips per Hour	Total Miles (One Day)	Day/Year	E (lb/VMT)	PM10 (ton/yr)
Triaxle truck(agg)	10	21	14	0.041	38	37.39	365	1.65	11.25
Single axle truck	10	11	6	0.0265	13	8.27	366	0.69	1.04
Tandem axle truck	10	15.5	10	0.0265	8.66	5.51	367	1.13	1.14
Triaxle truck(mix)	10	21	14	0.0265	6.5	4.13	368	1.65	1.25
Quad axle truck	10	25.5	18	0.0265	5.2	3.31	369	2.14	1.31
Front end loader	10	34.8	4	0.07	93.82	157.62	370	1.26	36.60
						Total fugitive PM10 emissions =			**52.59**
						Fugitive PM10 emission control =			50.00%
						Total fugitive PM10 emissions =			**26.30**

Uncontrolled Potential to Emit PM from Vehicle Travel on Unpaved Roads

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

E = (S/30) * (W/30)^0.7 * (w/4)^0.5 *(365-p)/ = lb particulate/vehicle mile traveled on unpaved roads (AP-42, 13.2.2)

k =	0.8	particle size multiplier for PM10 (constant)
s =	5.7	silt content of road surface material (%), unspecified municipal roads
p =	120	number of days with at least 0.01 inch of precipitation (per year)

S = mean vehicle speed (mph)
W = mean vehicle weight (tons)
w = number of wheels

Vehicle Type	Mean Speed (mph)	Mean Weight (tons)	# of Wheels	Trip (mi) Distance	# Trips per Hour	Total Miles (One Day)	Day/Year	E (lb/VMT)	PM (ton/yr)
Triaxle truck (agg)	10	21	14	0.041	38	37.39	365	3.66	25.01
Single axle truck	10	11	6	0.0265	13	8.27	366	1.53	2.31
Tandem axle truck	10	15.5	10	0.0265	8.66	5.51	367	2.50	2.53
Tri axle truck (mix)	10	21	14	0.0265	6.5	4.13	368	3.66	2.79
Quad axle truck	10	25.5	18	0.0265	5.2	3.31	369	4.76	2.90
Front end loader	10	34.8	4	0.07	93.82	157.62	370	2.79	81.34
						Total fugitive PM emissions =			**116.87**
						Fugitive PM emission control =			50.00%
						Total fugitive PM emissions =			**58.44**

Uncontrolled Potential to Emit PM from Handling

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

*AP-42 11.19.2-4: emission factors for crushed stone processing

Operation	Number of Points	Individual Rate (ton/hr)	Emission Factor : PM10 Uncontrolled (lb/ton)	Emission Factor : PM10 Controlled (lb/ton)	**Uncontrolled Emissions PM10 (ton/yr)**	**Controlled Emissions PM10 (ton/yr)**
Conveyor t	4	400	0.0014	0.000048	9.81	0.34
Screening	1	400	0.0150	0.000840	26.28	1.47
Front end l	1	400	0.0014	0.000048	2.45	0.08
				Total PM10	**38.5**	**1.9**

Per AP-42 11.19.2-6c: PM = PM10 x 2.1

Operation	Number of Points	Individual Rate (ton/hr)	Emission Factor : PM10 Uncontrolled (lb/ton)	Emission Factor : PM10 Controlled (lb/ton)	**Uncontrolled Emissions PM (ton/yr)**	**Controlled Emissions PM (ton/yr)**
Conveyor t	4	400	0.0029	0.000101	20.60	0.71
Screening	1	400	0.0315	0.001764	55.19	3.09
Front end l	1	400	0.0029	0.000101	5.15	0.18
				Total PM	**80.9**	**4.0**

Uncontrolled Potential to Emit PM,PM-10 from Storage Piles

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

AP42 11.2-3.1 (1987)

s = silt content of aggregate, worst	1.2
f = % time when wind > 12 mph at	15
p = no. of days/yr with > 0.01" pric	125
PC = total pile capacity (acres) =	1.83

EF [lb/day/acre] = 1.7 * (s/1.5) * [(365-p)/235] * (f/15)

EF [lb/day/acre] = 1.7 * (1.2/1.5) * [(365-125)/235] * (15/15)

EF [lb/day/acre] = 1.389

PM emissions = PC * EF * 365 day/yr * ton/2000 lbs

PM emissions = 1.83 acres * 1.389 lb/day/acre * 365 day/yr * ton/2000 lbs

PM emissions = 0.46 tons per year

PM10 = PM / 2.1= 0.22 tons per year

Per AP-42 11.19.2-6c: PM = PM10 * 2.1

Appendix A : Emission Calculations
Uncontrolled Potential to Emit PM,PM-10, HAPs from Batch Mixer

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

Unit	ID	Maximum Rated Capacity	Capacity Units	Control Device	Exhaust Flow (scfm)	Control Efficiency gr/dscf
Aggregate Batch Mixer	2/3, SV1	400	ton/hr	baghouse	48,000	0.03

(Fire 6.23,)

Unit	(lb/hr)	Controlled PTE (ton/yr)	Uncontrolled Emissions (Max Capacity, 8760 hr) (lb/hr)	(ton/yr)
Aggregate Batch Mixer (PM-10)	12.34285714	**54.06171429**	8120.30	**35566.92**
(PM)	12.34285714	**54.06171429**	8120.30	**35566.92**

	ACFM	Stack Temp/F	SCFM
Allowable PM10 Emissions for FESOP Limit	70,000	310	48,000

Allowable PM10 Emissions after allocation to all other emission units at the source = 38.3 tons/yr = 8.74 lbs/hr
Production Throughput Limit to limit the PM10 emissions from the Batch Mixer:

(3504000 * 38.3)/ 54.1
2487592.593 tons of Asphalt Per Year
207299.3827 tons of Asphalt Per Month

Short Term Allowable PM-10 Limit (lbs/ton): (70.58 tons/yr) x (2000 lbs/ton) / (2487592.593 tons/yr) = **0.056745626** lbs/ton of Asphalt

HAP Emission Calculations

Unit	Maximum Rated Capacity (tons/hr)	Emission Factor (lb/ton)	**Uncontrolled Emissions (tons/yr)**
Aggregate Batch Mixer	400		
Hazardous Air Pollutants (HAPs)			
Ethyl Benzene		2.20E-03	**3.85E+00**
Formaldehyde		7.40E-04	**1.30E+00**
Benzene		2.80E-04	**4.91E-01**
Toluene		1.00E-03	**1.75E+00**
Total HAP Emissions (tons/yr)			**7.39**

* A.P-42, Chapter 11.1

Nitrogen Oxide (NOX) Emissions from Dryer Burner

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

Heat Input Capacity:	150	MMBtu/hr
Heating Value of No.4 Distillate Oil	0.14	MMBtu/gallon
Heating Value of Butane :	0.094	MMBtu/gallon
Heating Value of Natural Gas:	1,000	Btu/Cubic Foot
Heating Value of Propane:	0.094	MMBtu/gallon
Heating Value of No.2 Distillate Oil	0.138	MMBtu/gallon
Heating Value of No.4 Waste Oil :	0.140	MMBtu/gallon
Heating Value of Landfill Gas :	500.000	Btu/ft^3

"NOX" Limit Natural Gas Limited Firing	
(pollutant)	(tons/yr)
PM	0.7
PM-10	2.6
SO2	0.2
NOx	96.3
VOC	1.9
CO	28.9

Dryer Burner NOX Limit:

	FESOP Limit:	99 tons per year NOX
-	Other Facilities:	2.74 tons per year NOX
	NOx Limit:	96.3 tons per year NOX

Annual Fuel Consumption: 1314.00 MMCF/yr

Natural Gas ("NOX") Usage Limit: 687.57 MMCF/yr

POTENTIAL EMISSIONS PER FUEL

Natural Gas:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.60	280.00	5.50	84.00
Potential Emission in tons/yr	1.2	5.0	0.4	184.0	3.6	55.2

Propane:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.60	0.60	0.10	19.00	0.25	3.20
Potential Emission in tons/yr	4.2	4.2	0.7	132.8	1.7	22.4

Butane :

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.60	0.60	0.09	21.00	0.26	3.60
Potential Emission in tons/yr	4.2	4.2	0.6	146.8	1.8	25.2

No. 4 Distillate Oil:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	7.00	6.00	75.00	47.00	0.20	5.00
Potential Emission in tons/yr	32.9	28.2	352.0	220.6	0.9	23.5

No. 4 Waste Oil:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	61.00	51.00	147.00	19.00	0.10	5.00
Potential Emission in tons/yr	286.3	239.3	689.9	89.2	0.5	23.5

No. 2 Distillate Oil:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.00	1.00	71.00	24.00	0.20	5.00
Potential Emission in tons/yr	9.5	4.8	338.0	114.3	1.0	23.8

Landfill gas

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/scf	0.000053	0.000053	0.00000575	0.0000283	0.000000544	0.00000347
Potential Emission in tons/yr	69.6	69.6	7.6	37.2	0.7	4.6

Alternate Fuel Limits as Natural Gas Equivalent: NOX

Fuel	*NOX Emission Factor*		*Limit (MMCF/Fuel)*	
Natural Gas	280	lb/MMCF	1.000	MMCF/MMCF
No. 4 Waste Oil	19	lb/Kgal	0.068	MMCF/Kgal #4W
No. 4 Distillate Oil	47	lb/Kgal	0.168	MMCF/ Kgal #No.4
Butane	21	lb/Kgal	0.075	MMCF/ Kgal Butane
Propane	19	lb/Kgal	0.068	MMCF/ Kgal Propane
No.2 Distillate Oil	24	lb/Kgal	0.086	MMCF/ Kgal #No.2
Landfill Gas	0.0000283	lb/scf	1.01071E-07	MMCF/scf

Methodology

MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Throughput(MMBtu/yr)=Heat Input Capacity (MMBtu/hr) * 8760 hrs/yr
Emissions (tons/yr) = Emission Factor (lb/MMCF) x Annual Fuel Consumption (MMCF/yr) / 2,000 lb/ton
Natural Gas Usage Limit (MMCF/yr) = Dryer Burner NOX Limit (tons/yr) x Annual Fuel Consumption (MMCF/yr) / NOX Potential Emissions (tons/yr)
Natural Gas Limited Firing (tons/yr) = Usage Limit (MMCF/yr) x Emission Factor (lb/MMCF) / 2,000 lb/ton
Alternate Fuel Limits (MMCF Natural Gas /Fuel) = Fuel Emission Factor (lb/Kgal)/ Natural Gas Emission Factor (lb/MMCF)
Emission Factors are from FIRE 6.23

Sulphur Dioxide (SO2) Emissions from Dryer Burner

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

Heat Input Capacity:	150	MMBtu/hr
Heating Value of No.4 Distillate Oil:	0.14	MMBtu/gallon
Heating Value of Butane :	0.094	MMBtu/gallon
Heating Value of Natural Gas:	1,000	Btu/Cubic Foot
Heating Value of Propane:	0.094	MMBtu/gallon
Heating Value of No.2 Distillate Oil :	0.138	MMBtu/gallon
Heating Value of No.4 Waste Oil :	0.140	MMBtu/gallon
Heating Value of Landfill Gas :	500.000	Btu/ft^3

"SO2" Limit
No.4 Waste Oil Limited Firing

(pollutant)	(tons/yr)
PM	38.5
PM-10	32.2
SO2	92.8
NOx	12.0
VOC	0.1
CO	3.2

Dryer Burner SO2 Limit:

	FESOP Limit:	99 tons per year SO2
-	Other Facilities:	6.22 tons per year SO2
	NOx Limit:	92.8 tons per year SO2

Annual Fuel Consumption: 9385.71 kgal/yr

No.4 Waste Oil ("SO2") Usage Limit: 1262.31 kgal/yr

POTENTIAL EMISSIONS PER FUEL

Natural Gas:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.90	7.60	0.60	280.00	5.50	84.00
Potential Emission in tons/yr	1.2	5.0	0.4	184.0	3.6	55.2

Propane:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.60	0.60	0.10	19.00	0.25	3.20
Potential Emission in tons/yr	4.2	4.2	0.7	132.8	1.7	22.4

Butane :

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	0.60	0.60	0.09	21.00	0.26	3.60
Potential Emission in tons/yr	4.2	4.2	0.6	146.8	1.8	25.2

No. 4 Distillate Oil:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	7.00	6.00	75.00	47.00	0.20	5.00
Potential Emission in tons/yr	32.9	28.2	352.0	220.6	0.9	23.5

No. 4 Waste Oil:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	61.00	51.00	147.00	19.00	0.10	5.00
Potential Emission in tons/yr	286.3	239.3	689.9	89.2	0.5	23.5

No. 2 Distillate Oil:

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/kgal	2.00	1.00	71.00	24.00	0.20	5.00
Potential Emission in tons/yr	9.5	4.8	338.0	114.3	1.0	23.8

Landfill gas

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/scf	0.000053	0.000053	0.00000575	0.0000283	0.000000544	0.00000347
Potential Emission in tons/yr	69.6	69.6	7.6	37.2	0.7	4.6

Alternate Fuel Limits as No.4 Waste Oil Equivalent: SO2

Fuel	*SO2 Emission Factor*	*Limit (Kgal/Fuel)*
Natural Gas	0.6 lb/MMCF	0.004 Kgal #4W/MMCF
No. 4 Waste Oil	147 lb/Kgal	1.000 Kgal #4W/Kgal #4W
No. 4 Distillate Oil	75 lb/Kgal	0.510 Kgal #4W / Kgal #No.4
Butane	0.09 lb/Kgal	0.001 Kgal #4W / Kgal Butane
Propane	0.1 lb/Kgal	0.001 Kgal #4W/ Kgal Propane
No.2 Distillate Oil	71 lb/Kgal	0.483 Kgal #4W/ Kgal #No.2
Landfill Gas	0.00000575 lb/scf	3.91156E-08 Kgal #4 W/ scf

Methodology

MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Throughput (MMBtu/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr
Emissions (tons/yr) = Throughput (MMBtu/yr) * Emission Factor (lb/kgal) x Heat Value Oil (gal/MMBtu)/2000lb/ton
No.4 Waste Oil Usage Limit (kgal/yr) = Dryer Burner SO2 Limit (tons/yr) x Annual Fuel Consumption (kgal/yr) / SO2 Potential Emissions (tons/yr)
No.4 Waste Oil Limited Firing (tons/yr) = Usage Limit (kgal/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton
Alternate Fuel Limits (Kgal No.4 WasteOil /Fuel) = Fuel Emission Factor (lb/Kgal)/ No.4 Waste Oil Emission Factor (lb/Kgal)
Emission Factors are from FIRE 6.23

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

Uncontrolled Emissions (tons/yr)

	Pollutants						
Process	**PM**	**PM-10**	**SO2**	**NOX**	**VOC**	**CO**	**HAPs**
Dryer Burner	282.2	236.0	680.1	223.8	3.6	55.2	12.2
Total Emissions (tons/yr)	**282.2**	**236.0**	**680.1**	**223.8**	**3.6**	**55.2**	**12.2**

Limited PTE (tons/yr)

	Pollutants						
Process	**PM**	**PM-10**	**SO2**	**NOX**	**VOC**	**CO**	**HAPs**
Dryer Burner	38.5	32.2	92.8	96.3	1.9	28.9	12.2
Batch Mixer	38.3	38.3	0.0	0.0	0.0	0.0	7.4
UnPaved Roads	58.4	26.3	0.0	0.0	0.0	0.0	0.0
Handling	4.0	1.9	0.0	0.0	0.0	0.0	0.0
Storage Piles	0.5	0.2	0.0	0.0	0.0	0.0	0.0
Cut Back Asphalt	0.0	0.0	0.0	0.0	97.0	0.0	0.0
Insignificant Activities	0.2	0.1	6.2	2.7	0.1	0.5	0.0
Total Emissions (tons/yr)	**139.9**	**99.0**	**99.0**	**99.0**	**99.0**	**29.4**	**19.6**

Company Name: Rieth-Riley Construction Co., Inc.
Street Address: 2605 South Kentucky Ave., Indianapolis IN 46241
County: Marion County
FESOP No.: 097-14764-00088
Permit Revision No : 097-16771-00088
Reviewer: Keshav Reddy

PTE Exisitng (tons/year)

Emission Unit	PM	PM-10	SO2	NOX	VOC	CO	HAP'S
Aggregate Dryer Burner	212.2	253.8	291.3	320.4	0.8	23.3	0.0

PTE Modification (tons/year)

Emission Unit	PM	PM-10	SO2	NOX	VOC	CO	HAP'S
Aggregate Dryer Burner	282.2	236.0	680.1	223.8	3.6	55.2	12.2

Increase in PTE (tons/year)

Emission Unit	PM	PM-10	SO2	NOX	VOC	CO	HAP'S
Aggregate Dryer Burner	70.0		388.9		2.8	31.9	12.2
Net Increase in PTE due to the Modifications at the Source (tons/year)	**70.0**	**0.0**	**388.9**	**0.0**	**2.8**	**31.9**	**12.2**

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Sulfur Dioxides (SO2)

	Month:				Year:													
Day	waste oil Usage gals/day	#4 distillate oil Usage gals/day	#2 distillate oil Usage gals/day	propane gas usage gals/day	butane gas usage gals/day	Natural gas Usage MM cf/day	Landfill gas Usage MM cf/day	Daily waste oil equivalent (~~0.7009~~ **0.510** x #4 distillate oil) (~~0.7336~~ **0.483** x #2 distillate oil) (~~0.0009~~ **0.001** x propane gas) (~~0.0009~~ **0.001** x butane gas) (~~5.607~~ **0.004** x MMCF nat. gas) (**0.0000000391156 x MMCF landfill gas**)	TOTAL waste oil Usage this day gals/day	waste oil usage last 365 days gals/365 days	waste oil LIMIT gals/365 days	**Average sulphur content (%)**			**Average heating value (MMBTU/gal)**		
												waste oil	**#4 dist. oil**	**#2 dist. oil**	**waste oil**	**#4 dist. oil**	**#2 dist. oil**
1											~~1,736,554~~ **1,262,310**							
2											~~1,736,554~~ **1,262,310**							
3											~~1,736,554~~ **1,262,310**							
4											~~1,736,554~~ **1,262,310**							
5											~~1,736,554~~ **1,262,310**							
6											~~1,736,554~~ **1,262,310**							
7											~~1,736,554~~ **1,262,310**							
8											~~1,736,554~~ **1,262,310**							
9											~~1,736,554~~ **1,262,310**							
10											~~1,736,554~~ **1,262,310**							
11											~~1,736,554~~ **1,262,310**							
12											~~1,736,554~~ **1,262,310**							
13											~~1,736,554~~ **1,262,310**							
14											~~1,736,554~~ **1,262,310**							
15											~~1,736,554~~ **1,262,310**							

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/position: Asphalt Plant Specialist
Signature:
Phone No.: (574) 875-5183 Ext. 20226
Date:

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Sulfur Dioxides (SO2)

Month: Year:

Day	waste oil Usage gals/day	#4 distillate oil Usage gals/day	#2 distillate oil Usage gals/day	propane gas usage gals/day	butane gas usage gals/day	Natural gas Usage MM cf/day	Landfill gas Usage MM cf/day	Daily waste oil equivalent (~~0.7009~~ **0.510** x #4 distillate oil) (~~0.7336~~ **0.483** x #2 distillate oil) (~~0.0009~~ **0.001** x propane gas) (~~0.0009~~ **0.001** x butane gas) (~~5.607~~ **0.004** x MMCF nat. gas) (**0.0000000391156 x MMCF landfill gas**)	TOTAL waste oil Usage this day gals/day	waste oil usage last 365 days gals/365 days	waste oil LIMIT gals/365 days	Average sulphur content (%)			Average heating value (MMBTU/gal)		
												waste oil	#4 dist. oil	#2 dist. oil	waste oil	#4 dist. oil	#2 dist. oil
16											~~1,736,554~~ **1,262,310**						
17											~~1,736,554~~ **1,262,310**						
18											~~1,736,554~~ **1,262,310**						
19											~~1,736,554~~ **1,262,310**						
20											~~1,736,554~~ **1,262,310**						
21											~~1,736,554~~ **1,262,310**						
22											~~1,736,554~~ **1,262,310**						
23											~~1,736,554~~ **1,262,310**						
24											~~1,736,554~~ **1,262,310**						
25											~~1,736,554~~ **1,262,310**						
26											~~1,736,554~~ **1,262,310**						
27											~~1,736,554~~ **1,262,310**						
28											~~1,736,554~~ **1,262,310**						
29											~~1,736,554~~ **1,262,310**						
30											~~1,736,554~~ **1,262,310**						
31											~~1,736,554~~ **1,262,310**						

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/position: Asphalt Plant Specialist
Signature:
Phone No.: (574) 875-5183 Ext. 20226
Date:

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Nitrogen Oxides (NOx)

	Month:		Year:								
Day	Natural gas usage MMCF/day	Waste oil usage gals/day	#4 distillate oil usage gals/day	#2 distillate oil Usage gals/day	Propane Gas Usage gals/day	Butane Gas Usage gals/day	Landfill Gas Usage MMCF/day	Daily Natural gas equivalent MMCF (~~0.029~~ **0.068** x #4 waste oil usage kgal) (~~0.036~~ **0.168** x #4 distillate oil usage kgal) (~~0.036~~ **0.086** x #2 distillate oil usage kgal) (~~0.038~~ **0.075** x butane usage kgal) (~~0.034~~ **0.068** x propane usage kgal) (**0.000000101071 x landfill usage MMC**F)	TOTAL Natural gas usage this day MMCF	TOTAL natural gas usage last 365 days gals/365 days	Natural gas LIMIT MMCF/365 days
1											~~350.18~~ **687.57**
2											~~350.18~~ **687.57**
3											~~350.18~~ **687.57**
4											~~350.18~~ **687.57**
5											~~350.18~~ **687.57**
6											~~350.18~~ **687.57**
7											~~350.18~~ **687.57**
8											~~350.18~~ **687.57**
9											~~350.18~~ **687.57**
10											~~350.18~~ **687.57**
11											~~350.18~~ **687.57**
12											~~350.18~~ **687.57**
13											~~350.18~~ **687.57**
14											~~350.18~~ **687.57**
15											~~350.18~~ **687.57**

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. :097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Nitrogen Oxides (NOx)

	Month:		Year:								
Day	Natural gas Usage MMCF/day	Waste oil Usage gals/day	#4 distillate oil usage gals/day	#2 distillate oil Usage gals/day	Butane gas usage gals/day	Propane gas usage gals/day	Landfill gas usage MMCF/day	Daily Natural gas equivalent MMCF (~~0.029~~ **0.068** x #4 waste oil usage kgal) (~~0.036~~ **0.168** x #4 distillate oil usage kgal) (~~0.036~~ **0.086** x #2 distillate oil usage kgal) (~~0.038~~ **0.075** x butane usage kgal) (~~0.034~~ **0.068** x propane usage kgal) (**0.000000101071 x landfill usage MMC**F)	TOTAL Natural gas usage this day MMCF	TOTAL Natural gas usage last 365 days MMCF/365 days	Natural gas LIMIT MMCF/365 days
16											~~350.18~~ **687.57**
17											~~350.18~~ **687.57**
18											~~350.18~~ **687.57**
19											~~350.18~~ **687.57**
20											~~350.18~~ **687.57**
21											~~350.18~~ **687.57**
22											~~350.18~~ **687.57**
23											~~350.18~~ **687.57**
24											~~350.18~~ **687.57**
25											~~350.18~~ **687.57**
26											~~350.18~~ **687.57**
27											~~350.18~~ **687.57**
28											~~350.18~~ **687.57**
29											~~350.18~~ **687.57**
30											~~350.18~~ **687.57**
31											~~350.18~~ **687.57**

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/Position: Asphalt Plant Specialist
Signature: _____
Phone No.: (574) 875-5183 Ext. 20226
Date: _____

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Particulate Matter (PM10)

Month:		Year:	
DAY	Amount of asphalt concrete produced this day (tons/day)	Amount of asphalt concrete produced last 365 days (tons/365 days)	asphalt concrete production limit (tons/365 days)
1			~~1,400,000~~ **2487592.6**
2			~~1,400,000~~ **2487592.6**
3			~~1,400,000~~ **2487592.6**
4			~~1,400,000~~ **2487592.6**
5			~~1,400,000~~ **2487592.6**
6			~~1,400,000~~ **2487592.6**
7			~~1,400,000~~ **2487592.6**
8			~~1,400,000~~ **2487592.6**
9			~~1,400,000~~ **2487592.6**
10			~~1,400,000~~ **2487592.6**
11			~~1,400,000~~ **2487592.6**
12			~~1,400,000~~ **2487592.6**
13			~~1,400,000~~ **2487592.6**
14			~~1,400,000~~ **2487592.6**
15			~~1,400,000~~ **2487592.6**

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision No. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Particulate Matter (PM10)

Month:		Year:	
DAY	Amount of asphalt concrete produced this day (tons/day)	Amount of asphalt concrete produced last 365 days (tons/365 days)	asphalt concrete production limit (tons/365 days)
16			~~1,400,000~~ **2487592.6**
17			~~1,400,000~~ **2487592.6**
18			~~1,400,000~~ **2487592.6**
19			~~1,400,000~~ **2487592.6**
20			~~1,400,000~~ **2487592.6**
21			~~1,400,000~~ **2487592.6**
22			~~1,400,000~~ **2487592.6**
23			~~1,400,000~~ **2487592.6**
24			~~1,400,000~~ **2487592.6**
25			~~1,400,000~~ **2487592.6**
26			~~1,400,000~~ **2487592.6**
27			~~1,400,000~~ **2487592.6**
28			~~1,400,000~~ **2487592.6**
29			~~1,400,000~~ **2487592.6**
30			~~1,400,000~~ **2487592.6**
31			~~1,400,000~~ **2487592.6**

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/Position: Asphalt Plant Specialist
Signature: _____
Phone No.: (574) 875-5183 Ext 20226
Date: _____

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Volatile Organic Compound (VOC)

Month:		Year:			
DAY	Type of liquid binder used this day	Amount of liquid binder used in the production of coldmix cutback asphalt this day (tons/day)	VOC, solvent content by weight of binder used this day (%)	Amount of VOC, solvent used this day (tons/day)	Amount of VOC, solvent used in lst 365 days (tons/365 days)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision No. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Volatile Organic Compounds (VOC)

Month: YEAR:

DAY	Type of liquid binder used this day	Amount of liquid binder used in the production of coldmix cutback asphalt this day (tons/day)	VOC, solvent content by weight of binder used this day (%)	Amount of VOC, solvent used this day (tons/day)	Amount of VOC, solvent used in lst 365 days (tons/365 days)
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/Position: Asphalt Plant Specialist
Signature: _____
Phone No.: (574) 875-5183 Ext 20226
Date: _____

IDEM
and
Indianapolis Office of Environmental Services
Air Quality Management Section - Compliance Data Group
Quarterly Report of 365 day Daily Rolling Total

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Sulfur Dioxides (SO2)

	Month:				Year:													
Day	waste oil Usage gals/day	#4 distillate oil Usage gals/day	#2 distillate oil Usage gals/day	propane gas usage gals/day	butane gas usage gals/day	Natural gas Usage MM cf/day	Landfill gas Usage MM cf/day	Daily waste oil equivalent (0.510 x #4 distillate oil) (0.483 x #2 distillate oil) (0.001 x propane gas) (0.001 x butane gas) (0.004 x MMCF nat. gas) (0.0000000391156 x MMCF landfill gas)	TOTAL waste oil Usage this day gals/day	waste oil usage last 365 days gals/365 days	waste oil LIMIT gals/365 days	Average sulphur content (%)			Average heating value (MMBTU/gal)		
												waste oil	#4 dist. oil	#2 dist. oil	waste oil	#4 dist. oil	#2 dist. oil
1											1,262,310						
2											1,262,310						
3											1,262,310						
4											1,262,310						
5											1,262,310						
6											1,262,310						
7											1,262,310						
8											1,262,310						
9											1,262,310						
10											1,262,310						
11											1,262,310						
12											1,262,310						
13											1,262,310						
14											1,262,310						
15											1,262,310						

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/position: Asphalt Plant Specialist
Signature:
Phone No.: (574) 875-5183 Ext. 20226
Date:

IDEM
and
Indianapolis Office of Environmental Services
Air Quality Management Section - Compliance Data Group
Quarterly Report of 365 day Daily Rolling Total

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Sulfur Dioxides (SO2)

Month: **Year:**

Day	waste oil Usage gals/day	#4 distillate oil Usage gals/day	#2 distillate oil Usage gals/day	propane gas usage gals/day	butane gas usage gals/day	Natural gas Usage MM cf/day	Landfill gas Usage MM cf/day	Daily waste oil equivalent (0.510 x #4 distillate oil) (0.483 x #2 distillate oil) (0.001 x propane gas) (0.001 x butane gas) (0.004 x MMCF nat. gas) (0.0000000391156 x MMCF landfill gas)	TOTAL waste oil Usage this day gals/day	waste oil usage last 365 days gals/365 days	waste oil LIMIT gals/365 days	Average sulphur content (%)			Average heating value (MMBTU/gal)		
												waste oil	#4 dist. oil	#2 dist. oil	waste oil	#4 dist. oil	#2 dist. oil
16											1,262,310						
17											1,262,310						
18											1,262,310						
19											1,262,310						
20											1,262,310						
21											1,262,310						
22											1,262,310						
23											1,262,310						
24											1,262,310						
25											1,262,310						
26											1,262,310						
27											1,262,310						
28											1,262,310						
29											1,262,310						
30											1,262,310						
31											1,262,310						

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/position: Asphalt Plant Specialist
Signature:
Phone No.: (574) 875-5183 Ext. 20226
Date:

IDEM
and
Indianapolis Office of Environmental Services
Air Quality Management Section - Compliance Data Group
Quarterly Report of 365 day Daily Rolling Total

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Nitrogen Oxides (NOx)

	Month:		Year:								
Day	Natural gas usage MMCF/day	Waste oil usage gals/day	#4 distillate oil usage gals/day	#2 distillate oil Usage gals/day	Propane Gas Usage gals/day	Butane Gas Usage gals/day	Landfill Gas Usage MMCF/day	Daily Natural gas equivalent MMCF (0.068 x #4 waste oil usage kgal) (0.168 x #4 distillate oil usage kgal) (0.086 x #2 distillate oil usage kgal) (0.075 x butane usage kgal) (0.068 x propane usage kgal) (0.000000101071 x landfill usage MMCF)	TOTAL Natural gas usage this day MMCF	TOTAL natural gas usage last 365 days gals/365 days	Natural gas LIMIT MMCF/365 days
1											687.57
2											687.57
3											687.57
4											687.57
5											687.57
6											687.57
7											687.57
8											687.57
9											687.57
10											687.57
11											687.57
12											687.57
13											687.57
14											687.57
15											687.57

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Air Quality Management Section - Compliance Data Group
Quarterly Report of 365 day Daily Rolling Total

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. :097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Nitrogen Oxides (NOx)

	Month:		Year:								
Day	Natural gas Usage MMCF/day	Waste oil Usage gals/day	#4 distillate oil usage gals/day	#2 distillate oil Usage gals/day	Butane gas usage gals/day	Propane gas usage gals/day	Landfill gas usage MMCF/day	Daily Natural gas equivalent MMCF (0.068 x #4 waste oil usage kgal) (0.168 x #4 distillate oil usage kgal) (0.086 x #2 distillate oil usage kgal) (0.075 x butane usage kgal) (0.068 x propane usage kgal) (0.000000101071 x landfill usage MMCF)	TOTAL Natural gas usage this day MMCF	TOTAL Natural gas usage last 365 days MMCF/365 days	Natural gas LIMIT MMCF/365 days
16											687.57
17											687.57
18											687.57
19											687.57
20											687.57
21											687.57
22											687.57
23											687.57
24											687.57
25											687.57
26											687.57
27											687.57
28											687.57
29											687.57
30											687.57
31											687.57

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/Position: Asphalt Plant Specialist
Signature: _____
Phone No.: (574) 875-5183 Ext. 20226
Date: _____

IDEM
and
Office of Environmental Services
Air Quality Management Section - Compliance Data Group
Quarterly Report of 365-day Rolling Total

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Particulate Matter (PM10)

Month:		**Year:**	
DAY	**Amount of asphalt concrete produced this day (tons/day)**	**Amount of asphalt concrete produced last 365 days (tons/365 days)**	**asphalt concrete production limit (tons/365 days)**
1			**2,487,593**
2			**2,487,593**
3			**2,487,593**
4			**2,487,593**
5			**2,487,593**
6			**2,487,593**
7			**2,487,593**
8			**2,487,593**
9			**2,487,593**
10			**2,487,593**
11			**2,487,593**
12			**2,487,593**
13			**2,487,593**
14			**2,487,593**
15			**2,487,593**

IDEM
and
Indianapolis Office of Environmental Services
Air Quality Management Section - Compliance Data Group
Quarterly Report of 365-day Daily rolling Total

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision No. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Particulate Matter (PM10)

Month:		Year:	
DAY	Amount of asphalt concrete produced this day (tons/day)	Amount of asphalt concrete produced last 365 days (tons/365 days)	asphalt concrete production limit (tons/365 days)
16			2,487,593
17			2,487,593
18			2,487,593
19			2,487,593
20			2,487,593
21			2,487,593
22			2,487,593
23			2,487,593
24			2,487,593
25			2,487,593
26			2,487,593
27			2,487,593
28			2,487,593
29			2,487,593
30			2,487,593
31			2,487,593

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/Position: Asphalt Plant Specialist
Signature: _____
Phone No.: (574) 875-5183 Ext 20226
Date: _____

IDEM
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Indianapolis Office of Environmental Services
Air Quality Management Section - Compliance Data Group
Quarterly Report of 365-day Rolling Total

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision no. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Volatile Organic Compound (VOC)

Month:		Year:			
DAY	Type of liquid binder used this day	Amount of liquid binder used in the production of coldmix cutback asphalt this day (tons/day)	VOC, solvent content by weight of binder used this day (%)	Amount of VOC, solvent used this day (tons/day)	Amount of VOC, solvent used in lst 365 days (tons/365 days)
1					
2					
3					
4					
5					
6					
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11					
12					
13					
14					
15					

IDEM
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Air Quality Management - Compliance Data Group
Quarterly Report of 365-day Daily rolling Total

Company Name: Rieth-Riley Construction Co. Inc.
Location: 2605 South Kentucky Ave., Indanapolis, IN 46241
Permit No: F097-14764-00088
Significant Permit Revision No. : 097-16771-00088
Source/Facility: Batch mixer/dryer burner
Pollutant: Volatile Organic Compounds (VOC)

Month:		YEAR:			
DAY	Type of liquid binder used this day	Amount of liquid binder used in the production of coldmix cutback asphalt this day (tons/day)	VOC, solvent content by weight of binder used this day (%)	Amount of VOC, solvent used this day (tons/day)	Amount of VOC, solvent used in lst 365 days (tons/365 days)
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

☐ No deviation occurred in this month.
☐ Deviation/s occured in this month
Deviation has been reported on: _____

Submitted by: Dean K. Logan
Title/Position: Asphalt Plant Specialist
Signature: _____
Phone No.: (574) 875-5183 Ext 20226
Date: _____